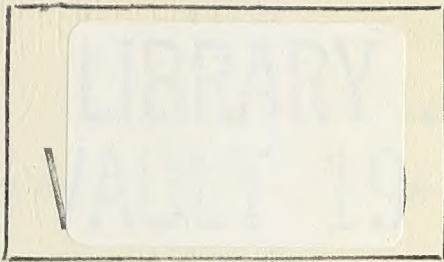


CA2 ALEA
A45
1951
c.2



ALBERTA
PROVINCIAL LIBRARY



GOVERNMENT

OF THE

PROVINCE OF ALBERTA


ANNUAL OIL REVIEW

1951

DEPARTMENT OF ECONOMIC AFFAIRS

HON. A. J. HOOKE
MINISTER

RALPH R. MOORE
DEPUTY MINISTER



Digitized by the Internet Archive
in 2017 with funding from
Legislative Assembly of Alberta - Alberta Legislature Library

ALBERTA OIL REVIEW

1951

Alberta continues to be by far the largest contributor to Canadian oil production and an increasingly important partner in the world petroleum drama.

In 1951 the province produced approximately 96 percent of Canada's oil and rose to the position of ninth amongst oil producing nations.

Last year's production of Alberta crude amounted to 45,915,384 barrels of (35 imperial gallons). In addition there were 515,027 barrels of natural gasoline from three sources of distillate, to make a total of 46,430,411 barrels, overtopping the 1950 record by 68 percent. More detailed figures will be found in Table A.

To this the largest contributor was the Redwater field, 45 miles northeast of Edmonton, with 23,177,607 barrels of crude, in itself but little short of last year's production in all Alberta. (See Table B). Reserves in this field have been estimated at 760 million barrels.

The Leduc field with its 275-million barrel reserve accounted for 13,743,118 barrels of crude and 43,597 barrels of natural gasoline, a total of 13,786,715 barrels and an increase of 30 percent. (See Table C).

In the Foothills area of the southwest, birthplace of Alberta's oil industry, the Fincher Creek field came into prominence last year with an estimated 1.6 trillion cubic feet of wet gas reserves, equivalent of 30 million barrels of high gravity oil. Success in the Jumping Pound field gave further impetus to fresh exploration in the Foothills for new major fields.

On the other hand, Turner Valley, earliest of the Alberta fields, continues to decline although still third greatest producer. In 1951 production amounted to 2,952,307 barrels of crude and 464,882 barrels of natural gasoline or 3,417,189 total—a seven-percent recession from the preceding year. (The extent of the decrease between 1949 and 1950, however, was over 12 percent.)

Notwithstanding that Alberta's oil industry was cradled in the Turner Valley it was the Leduc field which in 1947

THE LEDUC DISCOVERY

really brought Alberta into the world petroleum picture; not so much on account of the initial production figures as of (1) its arrival on the scene at a time when Turner Valley, then Canada's only major oilfield, was showing a disconcertingly falling production and (2) of its being the first discovery in the plains area where light crude had not been found before.

It was therefore the Leduc discovery which gave the initial impulse to the Alberta oil industry on its present scale, and it is in this field, southwest of Edmonton, that the greatest development activity is now in progress. At the end of April of the present year there were nearly 900 wells operating or capable of being operated and producing an average of over 40,000 barrels daily; and new wells are being brought into production, or made capable of production, at a rate of between two and three a day -- ~~the~~ figure has reached four.

But after five years of operation the limits of this field have yet to be defined. Today the main field is more or less surrounded by smaller satellite fields, some not less promising than their big neighbor.

The most recent discovery of importance was at Wizard Lake, a short distance south of the Leduc field and credited with 100 million barrels reserve. As in the Leduc field, three producing zones were found here, one lower cretaceous and two Devonian, and recent reports were that the last-named has a producing horizon 640 feet thick, thereby eclipsing Golden Spike No. 4's 560-foot sensation of two years ago. (Later, Texas Bonnie Glen No. 1 established another record with 687 feet of D3 reef).

In addition to numerous exploratory wells and almost unbounded geophysical activity a score of fields can be counted from northwest to southeast with the Leduc field at their centre. At the end of April the most important of these were:

Field	Daily Average Production	Number of wells
Acheson	3,259	74
Golden Spike	1,106	9
Wizard Lake	6,064	15
Joseph Lake	3,269	79
Campbell	161	12
Duhamel	660	15
Stettler	900	53
Big Valley	864	32

In the east central portion of the province is Lloydminster, astride the Alberta-Saskatchewan border, largest heavy crude field yet discovered in Canada. Noted for its black, asphaltic "BLACK OIL" product, it is the source of diesel and other fuel oils

FIELDS

which are rapidly replacing coal on Canadian railways and in many branches of industry. From north to south the field is 44 miles long and from east to west 42 miles wide without including the Wainwright and Vermilion fields close by.

Besides its use as fuel for railways, shipping and ever-multiplying industries, there is a brisk demand for the product for use in briquetting plants and for road paving.

There are two refineries in the field with a combined capacity of 10,000 barrels daily besides those at Wainwright and Vermilion which serve their respective fields and have an aggregate capacity of 1,500 barrels daily.

Last year these fields together produced 959,264 barrels of "black oil" of which 900,469 barrels were from the Alberta side of the Lloydminster field, 14,238 from the Wainwright field and 44,557 from the Vermilion.

In the northwest corner of Alberta, known as the Peace River country, extensive exploration has been going on for the

OPERATIONS IN past three years and is now but little less active
PEACE RIVER

than in and around the Leduc field. The town of Peace River is completely encircled by geophysical crews and some are at work south of

the River itself, west of Grande Prairie. Peace River settlements oil put on the map in 1951 include Belloy, Bluesky, Dizzy Creek, Rat Lake and Hamelin Creek.

Peace River oil possibilities first came into the public's ken two years ago with the coming into production of Normandville No. 1, near Peace River, and later of Whitelaw No. 1 in the same general vicinity.

At the close of last year there were reputed to be some 20 drilling rigs and about 30 geophysical crews at work in this corner of Alberta, and recently, a bare thirty miles across the provincial border, operators in the province of British Columbia were galvanized into renewed fervor by the kicking in, near Fort St. John, of that province's first oil well.

At the present time the Peace River oil seekers' chief problem is marketing. Peace River fields are almost at the end of steel; the new British Columbia discovery is actually beyond the end of steel and without means of egress except by truckage to Dawson Creek, terminal of the Northern Alberta Railways, and thence by rail to the Edmonton refineries 500 miles to the southeast.

But the Fort St. John discovery was quickly followed by granting of authority to a private company to lay a 693-mile pipeline from Edmonton to refineries at Burnaby on Vancouver's outskirts. Work on this project will be begun about June, the route of the pipeline passing only some 200 miles south of the Peace River oilfields. The \$83 million project is little less in magnitude than Interprovincial's Edmonton-Superior system. It is to be of 24-inch diameter pipe and two pumping stations will provide an initial capacity of 75,000 barrels daily. Additional pumping stations will be established to provide ultimate capacity of 200,000 barrels a day.

Clearance is scheduled to begin about June and the laying of pipe will be carried out, as the Interprovincial was, from both terminals as well as by two crews working from Red Pass Junction, B.C., and from the vicinity of Kamloops.

By the end of April this year there were 3,000 wells in operation in all parts of the province, representing a 35 percent

increase in a year. Production from these wells at the same date was in the neighbourhood of 130,000 barrels daily.

Nowhere in North America except in the State of Texas is exploration for oil proceeding at a faster pace than in Alberta. Of 153 geophysical parties at work in Western Canada toward the close of 1951, 104 were in this province. Locations of these crews extend all the way from the United States border to the Northwest Territories and from the foothills of the Rockies to the Saskatchewan boundary.

Although it would be far from the truth to suppose the more southerly fields have been drilled out, it is nevertheless inescapable that oil seekers are now pushing farther and farther into the Alberta hinterland, blazing new trails where few human feet or none have trodden before, to say nothing of caterpillars and bulldozers.

Obviously the cost of such operations is higher and calls for more capital; for as Mr. G. L. Stewart, president of Imperial Oil Limited, has pointed out, it is possible that some of the remote areas may require expenditures of \$20 millions to \$50 millions before a single barrel of oil is piped to market.

Yet operators continue confidently to invest more and more millions every year in exploration in developing existing fields and in the search for new. In Alberta alone in 1951 they made 98 new discoveries, 35 of them oil and 63 gas.

Preliminary estimates of last year's expenditure is some \$200 millions. In the year of the Leduc discovery (1947) \$35 millions were expended by a rapidly growing number of companies. In 1948 the corresponding figure was \$80 millions, in 1949, \$100 millions and in 1950, \$150 millions.

As had been anticipated, the increased production figures reflect modification of "market allowables" made possible by opening in 1950 of the 1,126-mile Interprovincial pipeline between Edmonton and Superior, Wis. From the Superior terminal the oil, stored during the winter months is shipped by lake tank steamer another 662 miles to Sarnia or to Toronto or other eastern refineries.

By these means Alberta oil appeared for the first time in competition with the American commodity on the Ontario market.

Alberta's oil reserves are now conservatively estimated at more than two billion barrels, but this does not take into account the bituminous sands along the banks of the Athabasca River. These oil-soaked deposits, in which renewed interest came into life last year, are situated some 350 miles north of Edmonton, some sixty miles downstream from McMurray and for some not yet determined distance up the Clearwater. But though still remote from markets and THE ATHABASCA'S refineries, this remarkable deposit is reputed OIL-SOAKED SAND to contain the richest known oil source in the world.

Believed to cover about 30,000 square miles, the deposits have been estimated by the Canadian Department of Mines and Resources to contain some 100,000 million barrels. The U. S. Bureau of Mines has been less conservative and had estimated the reserves at 250,000 million barrels. At the time these figures were made public the whole of the proven world reserves were estimated by the U.S. Geological Survey at only about a tenth of the greater of these figures.

Under both federal and provincial as well as private auspices for a time, experiments to determine the feasibility of extracting petroleum on a commercial basis have been going on since 1942 until they were recently brought to what appears to be a satisfactory conclusion.

These experiments, directed by the Alberta Council of Research, were supplemented by the investigation of a Toronto consulting engineer, Mr. S. M. Blair, who, at the end of a voluminous report, reached the conclusion that a desulphurized blend of gasoline and gas-oil could be laid down at Superior, Wis., on a basis competitive with oil from other sources.

In September of last year the Alberta government called a conference of heads of the oil industry who made what is perhaps the most exhaustive study the bituminous sands had yet been accorded -- excepting, of course, the patient experiments by the Research Council.

The conclusion the majority of those attending the conference appeared to reach was that purely mechanical questions have now been answered and that what remains is decision in such matters as operation methods, pipeline details and the raising of the initial capital.

Although petroleum continues to be the most sought for of Alberta's treasures, natural gas came into its own in 1951 with the assistance of amended regulations which re-leased it from a category in which it had been generally no more than an incident in the search for oil.

In that year its production, at 85,382,154,000 cubic feet, overtopped that of the preceding year by 13 percent.

In the following tabulation⁽¹⁾ attention is called to the remarkable development of the "other" fields, and particularly of the Jumping Pound field in the Foothills area, to which reference has been made on page 1.

Field	1951 Mcf	1950 Mcf	Increase or Decrease Mcf	%
Turner Valley	35,720,661	38,470,295	-2,749,634	-8
Leduc	8,367,545	6,122,001	+2,245,544	+37
Jumping Pound	4,677,615	52,400	+4,625,215	+885
Viking-Kinsella	19,587,222	18,908,554	+ 678,668	+3
Medicine H. - Redcliff	5,565,870	5,221,040	+ 344,830	+7
Foremost	225,110	239,929	- 14,819	-7
Other Areas	11,238,131	6,564,290	+4,673,841	+71
	85,382,154	75,578,509	+9,803,645	+13

Canada in 1951 attained ninth position amongst the world's 43 oil producing countries. The preceding year she was thirteenth in 1939
WORLD OIL⁽²⁾ PRODUCTION sixteenth amongst 29 countries.

Last year the world's daily average crude oil production amounted to 11,719 million barrels, an increase of 12.5 percent over 1950.

(1). Source: Monthly Report of the Alberta Petroleum and Natural Gas Conservation Board.

(2). See also Table A.

Far and away at the head of the parade was the United States with a daily average of 6,120 barrels, followed by Venezuela with 1,702 bpd and the USSR with 810 bpd.

The unpleasantness in Iran was responsible for a loss of 130 million barrels, an inequilibrium which is not likely to be easily restored even if the Abadan refinery were re-opened immediately. In the salty atmosphere of the Persian Gulf constant maintenance is vital. This degree of attention the shut-down refinery has probably not received or can receive in the circumstances.

It is estimated that world oil requirements this year will be about 4,700 million barrels, a seven percent increase.

A tabulation of the world's production in 1951 will be found in Table G annexed to the present review.

Of 48.1 million barrels valued at \$121.4 millions produced in Canada in 1951, Alberta as has been shown, contributed approximately 96 percent -- 46.4 million barrels worth \$118.7 millions.

Comparative figures follow:

	1951		1950		%	Approx.
	bbl	\$	bbl	\$	Inc. or Dec.	% Cdn. Prod'n
Alta.	46,403,000	118,684,350	27,548,169	82,216,492	+68	96.5
Sask.	1,250,000	1,562,000	1,041,098	1,134,797	+20	26.2
Man.	12,000	30,00025
Ont.	201,800	706,000	250,655	892,000	-19	4.0
N. B.	15,000	21,000	17,137	23,992	-12	.3
N. W. T.	215,000	404,200	186,729	352,656	+15	4.5
	<u>48,096,800</u>	<u>121,407,550</u>	<u>29,043,788</u>	<u>84,619,937</u>	<u>+69</u>	

Source: Preliminary figures, Dominion Bureau of Statistics.

The economic benefits of Alberta's oil production is something the whole nation shares. Savings of U.S. dollars that would have seemed almost incredible only a few short years ago are reflected in the multiplied output. In 1948, the first year after the Leduc discovery, the dollar saving was \$9 millions. A year later it was ten times that sum. In 1950 it was \$100 millions.

ALL CANADIANS
SHARE PROFITS

Access to the Ontario market made possible by the pipeline is expected to bring the 1951 saving up to \$150 millions.

There is another saving of a more specialized kind; the saving to the motorist, the manufacturer and other users of gasoline. According to Mr. L. D. Fraser, Manitoba marketing manager for Imperial, speaking before the Associated Chambers of Commerce of that province, the manufacture of gasoline from domestic crude resulted in a saving of five cents a gallon in Winnipeg, seven cents in Regina and ten cents in Edmonton. Assuming the annual prairie consumption to be 30 million barrels at an average of seven cents, this represents an economy of \$73.5 millions to prairie consumers.

Expansion in the past ten years of Alberta's population provides new markets and new buying power which has been estimated at a quarter billion dollars. More than 700 new Alberta companies and 200 foreign companies were registered in 1951.

CONCLUSION

-- Petroleum is now one of the most important minerals, approaching gold in dollar value, in the Canadian economy.

-- Over ninety percent of Canadian petroleum comes from Alberta oilfields, to give Canada a place amongst the uppermost oil producing countries of the world.

-- Near the close of 1951, 220 drilling rigs were at work in Western Canada -- an increase of 57 percent in one year. Of this number 97 were exploratory and 123 development. There were at the same time 153 geophysical parties as compared with 117 a year earlier.

-- These figures include 183 drilling rigs in Alberta, an increase of 43 percent, and 120 geophysical parties, more by about 15 percent than at the corresponding date a year earlier.

-- Economic by-products of the Alberta oil industry have now acquired a larger dollar value than the product itself -- e.g. a saving estimated at over \$70 millions in the cost of gasoline to prairie consumers; increased population, hence increased buying power estimated at \$250 millions; revenue to the public treasury which has made possible

the almost complete elimination of provincial taxes and progressive
reduction of the public debt to a point where debt-freedom is in sight.

o Oo

Edmonton
8 May 1952

TABLE A. (1)

ALBERTA OIL PRODUCTION

	1950			1951			Increase %	
	Natural		Total bbl	Natural		total bbl		
	crude bbl	gasoline bbl		crude bbl	gasoline bbl			
January	1,800,696	36,116	1,836,812	2,810,415	53,316	2,863,731	1,026,919	56
February	1,816,854	30,253	1,847,107	2,605,078	48,362	2,653,440	806,333	44
March	2,280,193	49,873	2,330,066	2,302,976	28,103	2,331,079	1,013	.03
April	1,874,797	41,792	1,916,589	2,307,875	24,233	2,332,108	415,519	22
May	1,777,727	30,777	1,808,504	4,310,781	27,030	4,337,811	2,529,307	139
June	2,013,551	30,241	2,043,792	4,566,598	38,950	4,605,548	2,561,756	125
July	2,437,281	32,760	2,470,041	4,742,041	39,461	4,781,502	1,311,461	53
August	2,277,639	32,795	2,310,434	5,139,223	42,833	5,187,803	2,577,369	125
September	2,573,517	32,227	2,605,794	4,732,770	43,263	4,776,038	2,170,244	82
October	2,834,507	44,697	2,879,204	4,686,139	54,579	4,740,718	1,361,544	64
November	3,022,494	46,109	3,068,603	3,915,802	55,360	3,971,162	902,559	28
December	2,440,062	35,963	2,476,025	3,795,686	59,532	3,855,218	1,379,193	56
Totals	27,149,318	446,346	27,595,664	45,915,384	515,027	46,430,411	18,834,747	68

Source (Tables A-F): Monthly reports of the Alberta Petroleum and Natural Gas Conservation Board.

TABLE BPRODUCTION FROM THE REDWATER FIELD

	1950 bbl	1951 bbl	<u>Increase</u>	
			bbl	%
January	448,978	1,394,380	945,402	210
February	547,783	1,251,165	703,382	127
March	872,088	994,687	122,599	14
April	646,797	1,023,970	377,173	58
May	634,722	2,395,116	1,760,394	277
June	784,362	2,507,263	1,722,901	219
July	879,863	2,675,558	1,795,695	204
August	824,516	2,856,051	2,031,535	246
September	1,097,773	2,505,684	1,507,911	137
October	1,358,662	2,286,287	927,625	68
November	1,517,204	1,713,104	195,900	13
December	<u>1,133,724</u>	<u>1,574,342</u>	<u>440,618</u>	<u>39</u>
Totals	10,746,472	23,177,607	12,431,135	115

*
* *TABLE EPRODUCTION FROM THE LLOYMINSTER FIELD

	1950 bbl	1951 bbl	<u>Increase or Decrease</u>	
			bbl	%
January	60,422	56,518	- 3,904	- 6
February	61,060	74,864	+13,804	+23
March	69,139	76,961	+ 7,822	+11
April	60,039	43,064	-16,975	-28
May	55,458	62,585	+ 7,127	+12
June	91,862	77,253	-14,609	-16
July	70,386	73,559	+ 3,173	+ 4
August	74,648	80,460	+ 5,812	+ 8
September	67,637	84,181	+16,544	+24
October	60,166	90,276	+30,110	+50
November	71,654	92,752	+20,098	+28
December	<u>67,330</u>	<u>87,996</u>	<u>+20,666</u>	<u>+31</u>
Totals	809,801	900,469	+90,668	+11

(3)

TABLE C

LEDUC-WOODBEND FIELD

	1950			1951			Increase or Decrease	
	Crude bbl	Natural Gasoline bbl	Total bbl	Crude bbl	Natural Gasoline bbl	Total bbl	bbl	%
January	899,394	...	899,394	841,877	2,830	844,707	-54,687	-6
February	345,993	...	845,993	804,624	2,712	807,336	-38,657	-4
March	948,679	...	948,679	714,189	2,001	716,190	-832,489	-24
April	771,534	...	771,534	756,593	2,114	758,707	-12,827	-1
May	676,467	...	676,467	1,233,470	3,091	1,236,561	+560,094	+82
June	751,070	...	751,070	1,332,537	3,379	1,335,916	+584,846	+78
July	1,074,078	2,693	1,076,771	1,293,539	4,252	1,297,791	+221,020	+20
August	664,688	2,570	967,258	1,398,328	4,949	1,403,277	+436,019	+45
September	985,267	3,084	988,371	1,367,630	3,243	1,370,873	+382,502	+38
October	935,652	2,450	938,102	1,416,452	5,235	1,421,687	+483,585	+52
November	979,031	2,375	981,406	1,315,534	5,127	1,320,661	+339,255	+36
December	757,599	1,850	759,449	1,268,345	4,664	1,273,009	+513,449	+56
Totals	10,589,472	15,022	10,604,494	13,743,118	43,597	13,786,715	+3,182,221	+30

(4)

TABLE D

TURNER VALLEY FIELD

	1950			1951			Increase or Decrease bbl	%
	Crude bbl	Natural Gasoline bbl	Total bbl	Crude bbl	Natural Gasoline bbl	Total bbl		
January	312,909	36,116	349,025	275,420	50,486	325,906	-23,119	-7
February	285,566	30,253	315,819	260,090	45,650	305,740	-10,079	-3
March	301,706	49,873	351,579	275,112	26,102	301,214	-50,365	-14
April	287,950	41,792	329,742	253,671	22,119	275,790	-53,952	-16
May	286,990	30,777	317,767	248,090	22,265	270,355	-47,412	-12
June	248,627	30,241	278,868	221,375	34,051	255,426	-23,442	-8
July	268,629	32,760	301,389	222,459	33,808	256,267	-45,122	-14
August	266,858	30,225	297,083	235,756	36,446	272,202	-24,881	-8
September	257,468	29,193	286,661	223,790	38,659	262,449	-24,212	-9
October	281,961	42,247	324,208	246,617	47,594	294,211	-29,997	-9
November	269,170	43,734	312,904	240,098	48,170	288,268	-24,636	-9
December	276,173	34,151	310,324	249,829	59,532	309,361	-10,963	-3
Totals	3,344,007	431,362	3,775,369	2,952,307	464,882	3,417,189	-258,180	-7

TABLE F

PRODUCTION FROM FIELDS NOT OTHERWISE TABULATED

	1951	1950	Increase or Decrease bbl	%
Acheson	918,158	51,393	866,765	+169
Armena	16,856	-	-	-
Armistie	25,293	-	-	-
Barrhead	35	599	564	- 94
Bashaw	11,318	-	-	-
Big Valley	155,580	10,215	145,365	-
Bonnyville	10,184	-	-	-
Campbell	60,436	60,012	424	+ .7
Camrose	46,222	-	-	-
Conrad	142,497	110,062	32,435	+ 29
Del Bonita	30,344	12,668	17,676	+140
Dina	12,646	17,887	12,646	- 30
Duhamel	184,582	-	-	-
Ellerslie	20,774	570	20,204	+323
Excelsior	723,005	272,186	450,819	+166
Glen Park	22,443	-	-	-
Golden Spike	640,972	292,873	348,099	+119
Joseph Lake	727,936	168,855	559,081	+332
Jumping Pound	41,936	362	41,554	-
New Norway	20,664	3,599	17,065	+474
Pincher Creek	24,677	-	-	-
Princess	92,189	122,909	30,720	- 23
Spring Coulee	9,297	4,604	4,693	+102
Taber	182,449	114,916	67,533	+ 59
Vermilion	44,557	49,041	4,484	- 9
Wainwright	14,238	15,360	1,122	- 8
Whitemud	25,803	45,437	19,634	- 43
Wizard Lake	190,595	-	-	-
Other Areas	<u>1,140,129</u>	<u>63,419</u>	<u>1,076,710</u>	<u>-</u>
	5,141,893	1,659,566	3,482,327	+210

TABLE G

WORLD CRUDE OIL PRODUCTION

(Thousands of barrels daily.)

<u>NORTH AMERICA</u>	<u>1939</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>
United States	3,465.7	5,046.0	5,402.0	6,120.0
Canada	19.1	57.5	78.3	131.0
Mexico	<u>162.0</u>	<u>167.0</u>	<u>199.0</u>	<u>210.0</u>
Total N. America	3,646.8	5,270.5	5,679.3	6,461.0
<u>SOUTH AMERICA.</u>				
Venezuela	567.0	1,321.4	1,498.0	1,702.0
Colombia	65.5	81.5	93.1	106.2
Argentina	51.0	63.5	64.0	71.0
Trinidad	52.8	56.5	56.5	56.6
Peru	37.1	40.5	41.2	44.0
Ecuador	6.3	7.2	7.4	7.4
Bolivia	0.6	1.9	1.7	1.5
Cuba	0.3	0.3	0.3	0.3
Brazil	...	0.3	0.8	2.2
Chile	<u>...</u>	<u>0.4</u>	<u>1.6</u>	<u>2.0</u>
Total S. America	780.6	1,573.5	1,764.6	1,993.2
WESTERN HEMISPHERE	4,427.4	6,844.0	7,443.9	8,454.2
<u>EUROPE</u>				
Roumania	128.5	85.0	89.0	89.0
Austria	11.7	25.0	28.4	44.0
Germany	12.3	16.3	21.6	27.1
Hungary	3.0	10.3	11.5	11.5
Poland	10.7	3.3	3.3	3.3
Netherlands	...	11.8	13.4	13.6
Albania	2.5	6.0	7.7	7.8
France	1.4	1.1	2.4	5.4
French Morocco	...	0.4	0.8	1.5
United Kingdom	0.1	0.9	0.9	0.9
Czechoslovakia	0.2	0.8	0.8	0.8
Yugoslavia	...	1.5	2.6	3.2
Italy	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>
Total Europe	170.6	162.6	182.6	208.4
USSR	603.0	690.0	750.0	810.0
<u>NEAR AND MIDDLE EAST</u>				
Iran	214.0	561.0	665.5	341.6
Saudi Arabia	10.8	477.0	546.7	765.0
Iraq	84.5	85.0	136.2	174.6
Kuwait	...	242.0	345.0	568.0
Bahrein	20.8	30.0	30.0	30.0
Qatar	33.7	48.4
Egypt	12.8	43.5	45.3	44.1
Turkey	<u>...</u>	<u>0.3</u>	<u>0.2</u>	<u>0.3</u>
Total	342.9	1,438.8	1,802.6	1,972.0

World Crude Oil Production (continued)

<u>FAR EAST AND OCEANIA</u>	<u>1939</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>
Indonesia	170.0	115.9	132.5	148.4
British Borneo	20.0	70.5	84.8	102.0
New Guinea	...	4.8	4.8	4.8
India)		5.3	5.3	5.2
Pakistan)	28.0	2.6	3.5	3.1
Burma)		1.0	1.6	2.0
Japan	7.3	3.7	5.7	6.8
China	...	2.0	2.0	2.0
	<u>225.3</u>	<u>205.8</u>	<u>240.2</u>	<u>274.3</u>
EASTERN HEMISPHERE	1,341.8	2,497.2	2,975.4	3,264.7
	<u>1,341.8</u>	<u>2,497.2</u>	<u>2,975.4</u>	<u>3,264.7</u>
WORLD TOTAL	5,769.2	9,341.2	10,419.3	11,718.9

Source: World Petroleum.

World Crude Oil Production (continued)

FAR EAST AND OCEANIA			
1951	1950	1949	1939
Indonesia	152.0	115.0	170.0
British Borneo	105.0	105.0	50.0
New Guinea	4.4	4.4	...
India	5.5	5.5	...
Pakistan	1.1	1.1	58.0
Burma	2.0	1.0	...
Japan	6.8	3.7	7.3
China	5.0	5.0	...
	540.2	505.8	555.3
EASTERN HEMISPHERE			
3,204.7	3,072.4	3,407.5	3,341.8
WORLD TOTAL			
11,718.9	10,495.5	10,321.5	9,797.1

Source: World Petroleum

